

WHAT IS CLAIMED IS:

- 5 1. A method of automatic configuration of a unit forming a component of an apparatus, the method comprising:
- 5 a) accessing class information held in the unit that represents an object class for the unit;
- b) using the accessed class information to reference object definitions for the class of unit, which object definitions include initialization code operable on receipt of the accessed class information to produce initial configuration information for the unit; and
- 10 c) storing the configuration information in a configuration file for the apparatus.
2. The method of claim 1, wherein, in step (b), the configuration code is operable to produce object configuration statements for the unit.
- 15 3. The method of claim 2, wherein the unit configuration statements comprise at least one of the following: the object class for the unit; an object instance number; an attribute name; and a value for the attribute.
- 20 4. The method of claim 2, wherein the configuration code is configured to access the unit for further configuration data held therein.
5. The method of claim 4, wherein the further configuration data comprises a device object class and device object attributes.
- 25 6. The method of claim 1, wherein the class information is held in non-volatile memory in the unit.

7. The method of claim 1, wherein step (a) comprises accessing class information from a unit on insertion of the unit into the apparatus, and wherein a further step (d) comprises functionally integrating the unit following step (c).
- 5 8. The method of claim 1, wherein step (c) comprises verifying the validity of the configuration information prior to storage in the configuration file.
- A3 9. The method of claim 8 for configuring a plurality of units for a configuration management system, wherein the class information identifies at least one configuration management system class for the unit.
- 10 10. The method of claim 1, wherein each location in the apparatus for receiving a said unit is probed for accessing class information held in a unit at that location.
- 15 11. The method of claim 10, wherein, in step (c), a set of object configuration statements for respective units are stored in the configuration file.
12. The method of claim 1, wherein the unit is a field replaceable unit.
- 20 13. Apparatus comprising:  
a plurality of units that include unit storage for holding class information for the unit that represents an object class for the unit;  
a configuration mechanism operable to access the class information from a unit and, in response thereto, to reference object definitions for the class of unit,  
25 which object definitions include initialization code operable on receipt of the accessed class information to produce initial configuration information for the unit; and

system storage operable to store the configuration information.

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14. The apparatus of claim 13, wherein the configuration code is operable to produce object configuration statements for the unit.
15. The apparatus of claim 14, wherein the unit configuration statements comprise at least one of the following: the object class for the unit, an object instance number, an attribute name and a value for the attribute.
- 10 16. The apparatus of claim 14, wherein the configuration code is configured to access the unit storage for further configuration data held therein.
17. The apparatus of claim 16, wherein the unit storage holds at least one device and the further configuration data comprises a device object class and device object attributes.
- 15 18. The apparatus of claim 13, wherein the unit storage comprises non-volatile memory.
- 20 19. The apparatus of claim 18, wherein the non-volatile memory is an EEPROM.
20. The apparatus of claim 13, wherein the configuration mechanism is responsive to derived configuration information to verify the validity of the configuration information prior to storage thereof in the system storage.
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21. The apparatus of claim 13, wherein the configuration mechanism is part of a configuration management system and the class information identifies at least one configuration management system class for the unit.
- 5 22. The apparatus of claim 21, comprising a chassis for a plurality of units locatable within the chassis.
23. The apparatus of claim 22, wherein the configuration mechanism probes each location in the apparatus for receiving a said unit for accessing class information held in a said unit at that location.
- 10 24. The apparatus of claim 23, comprising a configuration file in system storage for persistent storage of a set of object configuration statements for respective units.
- 15 25. The apparatus of claim 13, wherein a said unit is a field replaceable unit.
26. The apparatus of claim 13 forming a computer system.
27. The apparatus of claim 26, wherein the computer system is a fault-tolerant computer system.
- 20 28. A configuration management system operable on apparatus that includes a plurality of units that each have unit storage for holding class information that represents an object class for the unit, the configuration management system comprising an initialization component configured to access class information held in a unit of the apparatus, the class information representing an object class for the unit, to reference object definitions for the class of unit, which object definitions include initialization code operable on receipt of the accessed class
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information to produce initial configuration information for the unit, and to store the configuration information in storage.

5 29. The configuration management system of claim 28, wherein the initialization component is configured to probe each location in the apparatus for receiving a unit and, when a location is occupied by a unit, to read class information from storage in the unit.

10 30. The configuration management system of claim 28, wherein the initialization component is configured to access class information from a unit on insertion of the unit into the apparatus and to generate object definitions for the unit prior to functional integration of the unit.

15 31. A carrier medium carrying program means embodying a configuration management operable on apparatus that includes a plurality of units that each have unit storage for holding class information that represents an object class for the unit, the configuration management system comprising an initialization component configured to access class information held in a unit of the apparatus, the class information representing an object class for the unit, to reference object definitions for the class of unit, which object definitions include initialization code operable on receipt of the accessed class information to produce initial configuration information for the unit, and to store the configuration information in storage.

20 32. A field replaceable unit for apparatus that includes a plurality of such units, wherein the field replaceable unit comprises storage containing configuration class information representing an object class for the unit for deriving object class definitions for the field replaceable unit.

33. The field replaceable unit of claim 32, wherein the non-volatile memory contains further configuration information.

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5 34. The field replaceable unit of claim 32, wherein the storage is operable to record status information relating to system operation for providing an operating history for the field replaceable unit.

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